

What is claimed is:

- 1 1. A computer-readable medium encoded with a data structure for use
2 in an image file, the data structure comprising:
3 a data portion to include first image data related to a first multimedia
4 stream, and a first arbitrary data related to a second multimedia stream; and
5 a header portion to include a first header object comprising information
6 related to the first multimedia stream, and a second header object comprising information
7 related to the second data multimedia stream.
- 1 2. The computer-readable medium of claim 1, wherein the second
2 multimedia stream comprises second image data, the first and second image data
3 providing different representations of a single image.
- 1 3. The computer-readable medium of claim 1, wherein the data portion
2 includes data related to three or more multimedia streams.
- 1 4. The computer-readable medium of claim 2, wherein the first and
2 second image data comprise compressed and uncompressed image data, respectively.
- 1 5. The computer-readable medium of claim 2, wherein the first image
2 data is derived from a first camera setting and the second image data is derived from a
3 second camera setting.

1 6. The computer-readable medium of claim 2, wherein the first image
2 data represents the single image having a first pixel resolution, and the second image data
3 represents the single image having a second pixel resolution different from the first pixel
4 resolution.

1 7. The computer-readable medium of claim 2, wherein the first image
2 data represents the single image having a first pixel format, and the second image data
3 represents the single image having a second pixel format different from the first pixel
4 format, wherein a pixel format includes one or more components, component ordering,
5 and component numeric formats.

1 8. The computer-readable medium of claim 2, wherein the first image
2 data is derived using a first color space and second image data is derived from a second
3 color space.

1 9. The computer-readable medium of claim 2, wherein the first image
2 data is derived using a first color context and second image data is derived from a second
3 color context.

1 10. The computer-readable medium of claim 2, wherein the first image
2 data represents the single image having a first field of view, and the second image data
3 represents the single image having a second field of view. .

1 11. The computer-readable medium of claim 2, wherein the first image
2 data comprises raw image sensor data.

1 12. The computer-readable medium of claim 1, wherein the second
2 multimedia stream includes data representing an annotation of an image represented by
3 the first image data.

1 13. The computer-readable medium of claim 12, wherein the second
2 multimedia stream comprises audio data.

1 14. The computer-readable medium of claim 12, wherein the second
2 multimedia stream comprises video data.

1 15. The computer-readable medium of claim 1, wherein the second
2 multimedia stream comprises an executable component.

1 16. The computer-readable medium of claim 1, wherein the second
2 multimedia stream comprises second image data, wherein data from the first image data
3 and data from the second image data to be combined to represent an image that is larger
4 than individual images represented by the first and second image data.

1 17. The computer-readable medium of claim 1, wherein the second
2 multimedia stream comprises second image data, wherein data from the first image data

and data from the second image data to be combined to represent an image that is of higher quality than individual images represented by the first and second image data.

18. The computer-readable medium of claim 1, wherein the data structure further comprises metadata.

19. The computer-readable medium of claim 1, wherein the data structure further comprises an index portion to contain information related to a location of data stored in the data portion.

20. The computer-readable medium of claim 1, wherein data stored in the data portion is encrypted.

21. The computer-readable medium of claim 1, wherein the header portion further comprises digital rights management information.

22. The computer-readable medium of claim 21, wherein the digital rights management information contains information related to obtaining a license to access the first image data.

23. The computer-readable medium of claim 21, wherein the digital rights management information contains information related to obtaining a license to verify the authenticity of the first image data.

1 24. The computer-readable medium of claim 1, wherein the multimedia
2 data structure is compatible with advanced systems format (ASF).

1 25. The computer-readable medium of claim 1, wherein the second
2 multimedia stream comprises image, audio, video, graphics, text, date and time, location,
3 web links, or animation data.

1 26. A method for forming an image container file, comprising:
2 collecting image data;
3 forming a first multimedia stream in the image container file, the first
4 multimedia stream including a first image data derived from the collected image data and
5 a first header object having information related to the first image data;
6 collecting arbitrary data; and
7 forming a second multimedia stream in the image container file, the second
8 multimedia stream including first arbitrary data derived from the collected arbitrary data
9 and a second header object having information related to the first arbitrary data.

1 27. The method of claim 26, wherein the first arbitrary data comprises
2 second image data, the first and second image data providing different representations of
3 a single image.

1 28. The method of claim 27, wherein the first and second image data
2 comprise compressed and uncompressed image data, respectively.

1 29. The method of claim 27, wherein the first image data is derived from
2 a first camera setting and the second image data is derived from a second camera setting.

1 30. The method of claim 27, wherein the first image data represents the
2 single image having a first pixel resolution, and the second image data represents the
3 single image having a second pixel resolution different from the first pixel resolution.

1 31. The method of claim 27, wherein the first image data represents the
2 single image having a first pixel format, and the second image data represents the single
3 image having a second pixel format different from the first pixel format.

1 32. The method of claim 27, wherein the first image data is derived
2 using a first color space and second image data is derived from a second color space.

1 33. The method of claim 27, wherein the first image data is derived
2 using a first color context and second image data is derived from a second color context.

1 34. The method of claim 26, wherein the first image data comprises raw
2 image sensor data.

1 35. The method of claim 26, wherein the first arbitrary data comprises
2 data representing an annotation of an image represented by the first image data.

1 36. The method of claim 35, wherein the first arbitrary data comprises
2 audio, video, graphics, text, date and time, location, web links, or animation data.

1 37. The method of claim 26, wherein the first arbitrary data comprises
2 an executable component.

1 38. The method of claim 26, wherein the first arbitrary data comprises
2 second image data, wherein data from the first image data and data from the second
3 image data to be combined to represent an image that is larger than individual images
4 represented by the first and second image data.

1 39. The method of claim 26, wherein the first arbitrary data comprises
2 second image data, wherein data from the first image data and data from the second
3 image data to be combined to represent an image that is of higher quality than individual
4 images represented by the first and second image data.

1 40. The method of claim 26, further comprising adding metadata to the
2 image container file.

1 41. The method of claim 26, further comprising forming an index
2 portion to contain information related to a location of data stored in the image container
3 file.

1 42. The method of claim 26, further comprising storing digital rights
2 management information in the image container file.

1 43. The method of claim 42, wherein the digital rights management
2 information contains information related to obtaining a license to access the first image
3 data.

1 44. The method of claim 42, wherein the digital rights management
2 information contains information related to verifying the authenticity the first image data.

1 45. The method of claim 26, wherein the image file container contains
2 encrypted data.

1 46. The method of claim 26, wherein the multimedia data structure is
2 compatible with advanced systems format (ASF).

1 47. The method of claim 26, further comprising forming a plurality of
2 multimedia streams in the image container file, the plurality of multimedia streams
3 including the second multimedia stream, wherein another multimedia stream in the
4 plurality of multimedia streams includes second arbitrary data and a third header object
5 having information related to the second arbitrary data.

1 48. A system for storing image data, the system comprising:
2 an image data receiver; and

3 an image file generator to form an image container file having a plurality of
4 multimedia streams, the plurality of multimedia streams including a first multimedia
5 stream and a second multimedia stream, wherein the first multimedia stream to include
6 first image data derived from image data received by the image data receiver, and the
7 second multimedia stream to include arbitrary data.

1 49. The system of claim 48, wherein the arbitrary data comprises second
2 image data, the first and second image data providing different representations of a single
3 image.

1 50. The system of claim 48, wherein the arbitrary data comprises data
2 representing an annotation of an image represented by the first image data.

1 51. The system of claim 50, wherein the arbitrary data comprises audio,
2 video, graphics, text, date and time, location, web links, or animation data.

1 52. The system of claim 48, wherein the arbitrary data comprises an
2 executable component.

1 53. The system of claim 48, wherein the arbitrary data comprises second
2 image data, wherein data from the first image data and data from the second image data
3 to be combined to represent an image that is larger than individual images represented by
4 the first and second image data.

1 54. The system of claim 48, wherein the arbitrary data comprises second
2 image data, wherein data from the first image data and data from the second image data
3 to be combined to represent an image that is of higher quality than individual images
4 represented by the first and second image data.

1 55. The system of claim 48, wherein the image file generator is further
2 to add metadata to the image container file.

1 56. The system of claim 48, wherein the image file generator is further
2 to add index information related to locations of first image data and the first arbitrary data
3 within the image container file.

1 57. The system of claim 48, wherein the image container file contains
2 encrypted data.

1 58. The system of claim 48, wherein the image file generator is further
2 to store digital rights management information in the image container file.

1 59. The system of claim 58, wherein the digital rights management
2 information contains information related to obtaining a license to access the first image
3 data.

1 60. The system of claim 58, wherein the digital rights management
2 information contains information related to verifying the authenticity of the first image
3 data.

1 61. The system of claim 48, wherein the image container file can be
2 accessed using a multimedia viewer.

1 62. The system of claim 61, wherein the multimedia viewer comprises a
2 viewer that can view advanced systems format (ASF) files.

1 63. A computer-readable medium having components as recited in
2 claim 48.

1 64. A system for storing image data, the system comprising:
2 means for collecting image data; and
3 means for generating an image container file that includes a plurality of
4 multimedia streams, the plurality of multimedia streams including a first multimedia
5 stream and a second multimedia stream, wherein the first multimedia stream includes
6 first image data derived from image data received by the image data receiver, and the
7 second multimedia stream includes arbitrary data.

1 65. The system of claim 64, wherein the arbitrary data comprises second
2 image data, the first and second image data providing different representations of a single
3 image.

1 66. The system of claim 64, wherein the arbitrary data comprises data
2 representing an annotation of an image represented by the first image data.

1 67. The system of claim 66, wherein the arbitrary data comprises audio,
2 video, graphics, text, date and time, location, web links, or animation data.

1 68. The system of claim 64, wherein the means for generating
2 selectively encrypts data contained in the image container file.

1 69. The system of claim 64, wherein the arbitrary data comprises an
2 executable component.

1 70. The system of claim 64, wherein the means for generating includes
2 means for adding metadata to the image container file.

1 71. The system of claim 64, wherein the means for generating includes
2 means for storing index information related to locations of the first image data and the
3 first arbitrary data within the image container file.

1 72. The system of claim 64, further comprising means for storing digital
2 rights management information in the image container file.

1 73. The system of claim 72, wherein the digital rights management
2 information contains information related to obtaining a license to access the first image
3 data.

1 74. The system of claim 72, wherein the digital rights management
2 information contains information related to verifying the authenticity of the first image
3 data.

1 75. A computer-readable medium having components as recited in
2 claim 64.

1 76. The computer-readable medium of claim 2, wherein the camera
2 settings comprises exposure settings.

1 77. The computer-readable medium of claim 2, wherein the camera
2 settings comprises white balance settings.

1 78. The method of claim 25, wherein the camera settings comprises
2 exposure settings.

1 79. The method of claim 25, wherein the camera settings comprises
2 white balance settings.